

2017 OP MA P1 – Answer Key

1. $x = -\frac{3}{7}$

2. $(3a - 2b)(x - 1)(x + 1)$

3. $3 < x \leq 8$

4. \$1645

5. (a) $a = \frac{3}{4}$

(b) 8.82 or 8.8 or 9

6. $\frac{3t - 2}{2(t - 2)^2}$

7. (a) 0.571

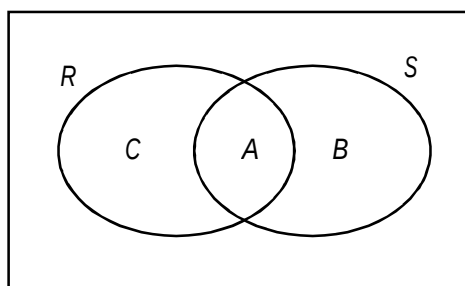
(b) 0.0113

8. (i) 19846

(ii) 3210

9.

ξ



10. $x = 64$

11. 7h 19 mins

12. (a) $x = 7$

(b) parallelogram

13. (a) 900°

(b) 2160°

14. (a) $2^3 \times 3^4 \times 7$

(b) $k = 21$

(c) 1512, 567

15. (a) 24

(b) 25 : 16

16. (a) 77.4°

(b) 22.4

17. (a) 174

(b) 942.4

18. (a) \$22.50

(b) $P = 0.88(0.8U + 0.9V)$

19. (b)(i) $S(4, -2)$

(ii) = 41 units²

21. (i) (a) $2r$ (i)(b) $0.886r^2$ (ii) 11.1 cm²

22(a)(i) $\frac{7}{18}$ (ii) $\frac{5}{9}$ (b)(i) $\frac{1}{4}$ (ii) $\frac{7}{8}$

20. (a) $\begin{pmatrix} 3 & 2 & 4 \\ 4 & 1 & 5 \end{pmatrix}$ (b) $\begin{pmatrix} 76 & 0 \\ 86 & -2 \end{pmatrix}$ (c) \$2 (d) \$68.40